

10/532570

JC Rec'd PCT/PTO 25 APR 2005

Docket No.: 09086-00220-US
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Hans-Robert-Hellmuth Damrau et al.

Application No.: Not Yet Assigned

Confirmation No.: N/A

Filed: Concurrently Herewith

Art Unit: N/A

For: RACEMOSELECTIVE PREPARATION OF
ISOLABLE ANSA-METALLOCENE
BIPHENOXIDE COMPLEXES

Examiner: Not Yet Assigned

INFORMATION DISCLOSURE STATEMENT (IDS)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement accompanies the new patent application submitted herewith.

A copy of each reference on the PTO/SB/08 is attached.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this

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application by this firm) to our Deposit Account No. 03-2775, under Order No. 09086-00220-US.

Dated: 4/25/05

Respectfully submitted,

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PTO/SB/08a/b (08-03)

Approved for use through 07/31/2006, OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449A/B/PTO				Complete if Known	
				Application Number	Not Yet Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Hans-Robert-Hellmuth Damrau
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	1	of	2	Attorney Docket Number	09086-00220-US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
AA	US-4,380,676	04-19-1983	Rasberger		
AB	US-4,985,576	01-15-1991	Rohrmann et al.		
AC	US-2004/0010157	01-15-2004	Damrau et al.		
AD	US-6,262,286	07-17-2001	Gregorius et al.		

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)			
BA	EP-0 035 965	09-16-1981	Ciba Geigy AG		See US 4,380,676
BB	EP-0 397 499	11-14-1990	BP Chemicals Limited		
BC	WO-92/09545	06-11-1992	Massachusetts Institute of Technology		
BD	EP-0 700 935	03-13-1996	BASF AG		See Abstract
BE	WO-02/00672	01-03-2002	Basell Polyolefine GmbH		See US 2004/0010157
BF	DE-100 30 638	01-10-2002	Basell Polyolefine GmbH		See US 2004/0010157
BG	WO-9915538	04-01-1999	Targor GmbH		See US 6,262,286

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
CA	Waymouth, R. et al., "Enantioselective Hydrogenation of Olefins with Homogeneous Ziegler-Natta Catalysts", J. Am. Chem. Soc. 112 (1990), pp. 4911-4914.				
CB	Schmidt, K. et al., "Photochemical Isomerization of Me ₂ Si-Bridged Zirconocene Complexes, Application to Stereoselective Syntheses of <i>ansa</i> -Zirconocene Binaphtholate Stereoisomers", Organometallics, vol. 16, no. 8 (1997), pp. 1724-28.				
CC	Damrau, H-R.H. et al., "Racemo-Selective Synthesis of <i>ansa</i> -Zirconocene Derivatives from Zirconium Biphenolate Complexes", Organometallics, vol. 20, no. 25 (2001), pp. 5258-5265.				
CD	Coates, G. et al., "Enantioselective Cyclopolymerization: Optically Active Poly(methylene-1,3-cyclopentane)", J. Am. Chem. Soc. 113 (1991), pp. 6270-6271.				
CE	Rheingold, A. et al., "Preparation and Properties of Chiral Titanocene and Zirconocene Dichloride Complexes of a Chiral Ligand", Organometallics, vol. 11 (1992), pp. 1869-1876.				
CF	van der Linden et al., "Polymerization of α -Olefins and Butadiene and Catalytic Cyclotrimerization of 1-Alkynes by a New Class of Group IV Catalysts. Control of Molecular				
Examiner Signature		Date Considered			

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		Weight and Polymer Microstructure via Ligant Tuning in Sterically Hindered Chelating Phenoxide Titanium and Zirconium Species", J. Am. Chem. Soc. 117 (1995), pp. 3008-3021.	
	CG	Kaminsky W. et al., "Asymmetric oligomerization of propene and 1 butene with a zirconocene-aluminoxane catalyst" Angew. Chem. 101 1989 Nr.9, pp. 1304 to 1306. (See Abstract)	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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